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Only 6.6 percent of the 7.3 million cadastral yokes [10.4 million acres] on the Great Plains is forest land. The following table shows, for various areas, the percentages of forest land to total land area in 1927 and 1953.

Year	Transdanubia	Great Plains	Northern Hungary	All of Hungary
1927	16.4	4.9	23.0	12.2
1953	17.2	6.6	24.0	13.3

Although the timber stock is growing, it is still insufficient. A large percentage of the forest area consists of saplings, many of which are diseased and poor in quality. The high proportion of forest area with such sapling forests was reduced somewhat between 1930 and 1948, but is still unsatisfactorily high.

<u>Year</u>	Full-Grown Forests (1,000 cadastral yokes)	Sapling Forests (1,000 cadastral yokes)
1930	1,175.4	805.2
1948	1,205.0	648.6

The following table shows the area and the percent of area planted with eight kinds of trees in 1930 and 1948.

	1930		1948		
Kind of Tree	Area (1,000 cadastral yokes)	Area (%)	Area (1,000 cadastral yokes)	Area (%)	
Oak	630	31.8	492	26.5	
White oak	389	19.6	334	18.0	
Beech	211	10.6	176	9.5	
Elm	170	8.6	178	9.6	
Locust	278	14.1	346	18.7	
Poplar	63	3.2	59	3.2	
Other deciduous trees	125	6.3	152	8.2	
Pine	115	5.8	117	6.3	
Total	1,981	100.0	1,854	100.0	

The area planted with pine trees is small in Hungary, compared with other countries.

Country	Pine Forests (in % of total forest area)
Hungary	6.3
Yugoslavia	20.0
Rumania	24.0
Czechoslovakia	65.0
Austria	76.0
Poland	88.o

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Approximately 16 percent of the area set aside for forestation is bare. Of the 84.4 percent of actual forest area, more than half has been forested for less than 30 years, one third between 31 and 60 years, one tenth between 61 and 80 years, and one twentieth over 80 years.

At the time of land reform, all pieces of wooded property larger than 100 cadastral yokes [142 acres] became the property of the state. Such property totaled 1,544,466 cadastral yokes [2,193,142 acres], or 75 percent of Hungarian forest area. The Mallerd [Magyar Allami Erdogazdasagi Uzemek, Hungarian State Forestry] has estimated Hungary's tree stock at about 60 million cubic meters and the yearly increment at 1.2 million cubic meters. However, exact measurements have shown that the actual stock is larger.

The following table shows timber production from 1920 to 1938.

		->-0 00 1930.
Year	Gross Timber Production (cu m)	<u>Index (1920=100)</u>
1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1937	3,854.7 3,212.2 3,430.7 2,569.8 2,135.1 2,667.5 2,700.2 2,055.9 3,160.2 3,244.3 3,304.5 4,046.9 4,567.2 4,754.3 4,386.5 3,639.3 3,853.6 4,225.8	83.3 89.0 66.7 55.4 69.2 70.0 53.3 82.0 84.2 85.7 105.0 118.5 123.3 113.0 113.8 94.4
	. ,,	109.6

During the 19 years shown above, a yearly average of 3.5 million cubic meters of timber was exploited, which was well above the yearly increment.

The destruction of Hungary's forests was hastened by World War II. According to a government decree, a 2-year supply of timber was exploited every year, making an average of 4.3 million cubic meters per year.

Usually, forest areas were clea: -felled and were not replanted. After the liberation, 170,000 cadastral yokes [241,400 acres] of such land was taken over by the state.

As a result of the land reform, the wooded property of landowners and capitalists was turned over to the state in 1945, but overexploitation continued. Wood was needed for postwar reconstruction. Timber production between 1946 and 1949 averaged 4 million cubic meters per year. However, the amount exploited decreased during this period as shown by the following table.

Year	Gross Timber Production (1946=100)
1947 1948 1949	66.4 · 60.5 31.4



The manner of exploitation changed after the liberation. The quantity of trees produced by thinming and clearing away has risen from 10 percent in 1944 to 30 percent in 1954. As a result, the quality of the timber stock has improved.

The amount of timber for industry has increased from the previous [i.e., before the liberation] 16.3 percent to 36 percent in 1953. However, this increase is partially the result of cutting trees prematurely. In the state forestries, the quantity of trees exploited for thinning purposes increased as follows:

Year	Net Cu M of Timber Produced by Thinning (per cadastral yoke)
1951	4.1
1952	6.1
1953	6.3

The types of wood in demand and the manner in which the timber is used are constantly changing. A courty's wood requirements are shown by its consumption figures. Dissimilar statistical data are available for different periods, which makes a comparison of these figures impossible. Therefore, import, production, and consumption figures have been converted into round timber, with the proper conversion system. The following table shows timber consumption from 1920 to

Year	Total Consumption (1,000 cu m)	Index (1920=100)	% of Total Consumption Supplied by Domestic Froduction
1920	3,776	100.0	91.4
1921	5,112	135.4	56.2
1922	6,585	174.4	44.6
1923	6,617	175.2	34.8
1924	6,768	179.2	28.2
1925	7,079	187.5	33.7
1926	8,009	212.1	30.2
1927	7,972	211.1	23.1
1928	9,169	242.8	30.8
1929	8,727	231.1	33.3
1930	7,138	189.0	41.4
1931	6,439	170.5	56.3
1932	5,966	158.0	68.5
1933	5,695	150.8	74.7
1934	5,871	155.5	66.4

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1938

5,881

<u>Year</u>	Total Consumption (1,000 cu m)	Index (1920=100)	f of Total Consumption Supplied by Domestic Production
1935	5,807	153.8	67.6
19 3 6	5,538	146.7	58.8
1937	- 6,006	159.1	57-4

The amount of timber consumed, unlike the amount produced, followed the economic trend. Consumption rose until the end of 1928, slumped in 1933, and then rose again. After the 1929-1933 depression there was no period of prosperity. Consumption did not equal the averages of the preceding years; in fact, in 1938 it decreased slightly.

64.3

155.7

Between 1920 and 1938, the yearly consumption of timber per person was .76 cubic meter, a little higher than the European average of .71 cubic meter.

After the liberation, the consumption of industrial timber and firewood decreased significantly, primarily due to the reduction of imports. During this period of large-scale industrial expansion, substitutes for wood were used in construction. The use of coal for heating homes helped only slightly in relieving the serious shortage of firewood. The following table shows the indexes of timber consumption for the period 1947-1949.

Year	<u>Index (1946=100)</u>
1947 1948	73.0 83.4
1949	64.7

Hungary's timber supply has been and still is inadequate for the country's needs. This makes it necessary to rely heavily on imports.

During the economic boom, most of the wood used by Hungary was imported: During the economic crisis, import difficulties increased. Consumition was at its lowest and timber production at its highest peak. Because of the reduction of imports, domestic production increased in order to meet needs.

	Total Timber Con In 1,000	sumption	Amount of I Timber Expl In 1,000		Ratio of Domestic Exploitation to total
Year	Cu M	Index	Cu M	Index	Timber Consumption (%)
1928	5,169	100.0	2,328	100.0	30.8
1933	95نر5	62.1 11	4 ,255	150.5	74.7

During the past few years, the amount of timber imported, especially firewood, has been greatly reduced. The composition of such imports changed as follows:

	4 of Total Timber Import			
Year	Industrial Timber	Firewood		
Yearly avg for 1920-1938	35.0	65.0		
Yearly avg for 1946-1953	43-3	56.7		

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A comparison of timber consumption, production, and importation shows that about half of the country's needs must be supplied by imports; a heavy burden on the national economy. Its costs surpasses the export value of wheat.

Importing timber is difficult for other reasons. After World War II, the European nations, except for Yugoslavia, reduced timber production to preserve their stock. The following table shows the timber production of four neighboring countries.

Country	Avg Yearly Production, 1920-1938, (million cu m)	Avg Yearly Production, 1946-1950 (million cu m)
Austria	10.8	8.5
Poland	19.9	11.6
Czechoslovakia	16.0	10.3
Rumania	18.6	15.1

Every means must be used to conserve the timber supply. Wood impregnation must be more widely practiced for the conservation of railroad ties, telegraph and telephone poles, mine props, and wood for agricultural tools; substitutes must be used for wood whenever possible; economy must be increased; and wood processing must be modernized. Saws are often old-fashioned and much wood is wasted. There are no factories which handle all the steps of wood and waste processing, impregnation of food, steaming, etc. Afforestation must be increased, at first with rapidly growing trees.

Between 1920 and 1938, a yearly average of 41,500 cadastral yokes [58,930 acres] was afforested. A total of 90,285 cadastral yokes [128,205 acres] was afforested on the Great Plains between 1926 and 1938, i.e., a yearly average of 7,500 cadastral yokes [10,650 acres]. A total of 23,376 cadastral yokes [33,194 acres] of barren land was afforested, a yearly average of 1,948 cadastral yokes [2,766 acres].

An important change occurred after the liberation. Between 1946 and 1953, the amount of land afforested per year increased by 17,000 cadastral yokes [24,140 acres] per year over the yearly average between 1920 and 1938.

Period	Afforestation (1,000 cadastral yokes)	Index
	and the second s	
1920-1938 (yearly avg)	41.5	100
1946-1953 (yearly avg)	58.5	141

These figures alone do not show the great difference between the two periods in the problem of afforestation. In the 1920-1938 period, afforestation began on a large-scale during 1926, whereas after the liberation this began only about 1950. After 1945, 170,000 cadastral yokes [241,400 acres] of devastated land first had to be cleared before afforestation could begin. Therefore, the 41 percent increase over the period 1920-1938 includes great differences in quality.

During the first 4 years of the Five-Year Plan, three times as many trees were planted as were exploited. In the period 1950-1953 the area afforested was 293.8 percent of the area exploited.

After the restoration of the largest portion of the old cutting area, afforestation increased, especially after the 1951 decree of the Council of Ministers. Of the new area, 55 percent was under the national afforestation plan by 1953. Since 1950, the area devoted to shelter belts has increased by 15,000 cadastral yokes [21,300 acres].



 Year
 Total Area Forested (1,000 Eddastral yokes)
 Portion of Total Used as Shelter Belt (1,000 cadastral yokes)

 1950 (Jul-Dec)
 1.7
 0.2

 1951
 8.8
 1.9

 1952
 25.4
 5.5

 1953
 28.3
 7.6

However, not enough trees are being planted. The following table shows the degree of afforestation to be expected within 20 years at the present rate of afforestation.

Area	Area Planted in 20 Years at Present Rate of Afforestation (1,000 cadastral yokes)	Degree of Afforestation in 20 Years (%)
Transdarubia	246.0	21.0
Great Plains	356.0	11.4
Northern Hungary	72.0	27.1

The flood plains are of particular interest in afforestation. There are two ways of dealing with them. First, these areas could be completely afforested, including the flood areas suitable for agriculture. The other possibility, favored by the party and government programs, is to carry on intensive farming of the cultivable land in the flood areas, afforesting only those areas unsuitable for agriculture.

